ABSTRACT

An exemplary signal processing system determines vector mismatch between a plurality of signal paths. Advantageously, the system can determine mismatch across a range of frequencies. A signal generator of the system can provide a periodic calibration signal having a plurality of frequency components. The system frequency can translate the calibration signal to provide a first set of observed samples. The first sample set can be compared to a second set of samples, which can be modeled by a function of parameters including an estimated vector mismatch and a plurality of basis functions. A value of vector mismatch can then be determined (at least to an estimate) that minimizes the difference between the first sample set and the second sample set. Methods and other systems with different advantageous configurations are also described.